COURSE DESCRIPTIONS

OVERVIEW OF IECC 2006 PROVISIONS FOR RESIDENTIAL BUILDINGS
(Full day, 8:30 a.m. – 4:00 p.m., lunch provided)

This full-day training session offers an overview of the residential provisions of the 2006 International Energy Conservation Code (IECC) and is geared for those who have not had in-depth experience with the IECC. This in-depth course will cover the code provisions and the reasons behind the provisions. This course will cover the following topics:

- What projects must comply with the residential provisions of the IECC?
- How do I determine my Climate Zone?
- How can the provisions of the 2006 IECC be achieved?
  - Air sealing and vapor retarders
  - Prescriptive Table Approach
  - Prescriptive UA Approach
  - Simulated Performance Approach
  - US DOE REScheck
- What construction options are available to reduce my first cost of construction?
- What requirements apply to the heating, cooling and water heating system?

The course will also cover IECC compliance with alternative construction practices; e.g., conditioned/unvented attic assemblies, credit for tight building construction and duct systems, etc.

Dates: April 21, June 18, June 19, July 30, August 20, September 10, September 25, October 8, October 9, November 6

OVERVIEW OF IECC 2006 PROVISIONS FOR COMMERCIAL BUILDINGS
(Full day, 8:30 a.m. – 4:00 p.m., lunch provided)

This full-day class covers the provisions of the 2006 IECC that affect commercial buildings. The course is targeted toward engineering, design, and enforcement professionals. The course will cover the following topics:

- What are the scope and application requirements for commercial buildings in the 2006 IECC?
- What is my new climate zone?
- What are the new requirements for building envelope and fenestration?
- How have requirements for mechanical systems been restructured to make the code more usable?
- What new requirements are included for mechanical systems to increase the efficiency of the building?
- How have the lighting control requirements been modified from the 2003 IECC?
- What are the new lighting levels (watts/ft^2) that will pertain to commercial buildings?
- How do I determine my lighting budget for exterior lighting?

Dates: March 18, April 22, June 20, July 29

COMMERCIAL BUILDING PLAN REVIEW FOR THE 2006 IECC
(Full day, 8:30 a.m. – 4:00 p.m., lunch provided)

Performing a plan review for compliance with the commercial provisions of the 2006 IECC can be a difficult process because the code requirements regulate the building envelope, lighting, and mechanical systems. This requires the plan reviewer to have a breadth of knowledge for three disciplines in order to verify that the plans and documentation meet the code requirements. This hands-on workshop will walk the participant through an energy plan review based on an actual project. The objective of the course is for each participant to complete a plan review of a commercial building for the lighting, mechanical, and envelope systems. Participants will work in small groups or individually to successfully complete a residential IECC plan review. Participants are requested to bring the following:

- A set of residential building plans and associated code compliance documentation (COMcheck)
- A calculator
- A ruler or architectural scale

Dates: August 21, September 24, November 5

2006 IECC FOR RESIDENTIAL HVAC SYSTEMS
(Morning class; 8:30 a.m. – 12:00 p.m.)

The 2006 International Energy Conservation Code and International Residential Code contain provisions that affect the sizing of residential heating and cooling systems, duct design, and the insulation and sealing of duct systems. To assist the residential HVAC industry to better understand the requirements of the code, this half-day course will cover the following topics:

- Overview of requirements for heat loss/gain calculations
- Sizing of heating and cooling equipment
- Understanding the basics of heat transfer into and out of a house
- Overview of heat loss calculations (based on Manual J)
- Overview of heat gain calculations
- Duct insulation and sealing requirements

Dates: March 19, December 3

RESIDENTIAL BUILDING PLAN REVIEW FOR THE 2006 IECC
(Morning class; 8:30 a.m. – 12:00 p.m.)

Performing a plan review for compliance with the residential provisions of the 2006 IECC can be an intimidating process. Often plan review staff have limited time to review the documentation so understanding what to review on the plans and energy code documentation is essential to ensuring that the buildings comply with the code. Plan review staff must understand how to read the REScheck reports and how to compare this to the building plans. Performance based software is also being used to show compliance with the IECC and it is important to understand what to review on the documentation provided by the software. This hands on half-day workshop will walk the participant through an energy plan review based on an actual project. Participants will work in small groups or individually to successfully complete a residential IECC plan review. Participants are requested to bring:

- A set of residential building plans and associated code compliance documentation (REScheck)
- A Calculator
- A ruler or architectural scale

Dates: September 11, December 5

COMMERCIAL BUILDING LIGHTING REQUIREMENTS FOR THE 2006 IECC
(Afternoon class; 1:00 p.m. – 4:30 p.m.)

This half-day class provides a detailed discussion of the 2006 International Energy Conservation Code requirements for lighting in commercial buildings. The class focuses on the Chapter 5 requirements and covers the following topics:

- Determining compliance with the IECC
- Switching and controls
- Interior lighting power densities (watts/sq.ft.) and how to calculate
- Exterior lighting power densities and control requirements
- Lighting designs and technologies available to meet 2006 IECC requirements

Dates: September 11, December 5

2006 IECC FOR COMMERCIAL HVAC SYSTEMS
(Afternoon class; 1:00 p.m. – 4:30 p.m.)

The requirements for HVAC systems in Chapter 5 of the International Energy Conservation Code are difficult to understand without the knowledge of how mechanical systems work. This half-day course discusses the principles of how both simple and complex HVAC systems work and then focuses on the IECC requirements that apply to the system types. The course will cover the following topics:

- Overview of commercial mechanical systems
- Requirements for simple HVAC systems (e.g., single zone, unitary systems)
- Requirements for complex HVAC systems including VAV systems, built-up systems using a chiller and boiler, water source heat pump systems and other commercial HVAC systems.

Dates: March 19, December 3